

REMARKS

Reconsideration of the application in light of the amendments and the following remarks is respectfully requested.

Status of the Claims

Claims 21-27, 29-34 are pending in this application. Claims 1-20 and 28 were canceled by previous Amendment without prejudice or disclaimer. Claims 21, 22, 26 and 27 have been amended. No new matter has been added.

Applicant appreciatively acknowledges the Examiner's indication that claim 32 contains allowable subject matter and that claim 32 would be allowable if rewritten in independent format including the limitations of its base independent claim and all intervening claims.

Rejections Under 35 U.S.C. § 112

Claims 22 and 27 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner contends that the phrase "relatively low" is unclear.

The phrase identified by the Examiner refers to the pressure of the saline solution (claim 22) and a secondary refrigerant (claim 27). Applicant has amended claims 22 and 27 to replace the phrase "relatively low pressure" with the phrase "pressure less than 700 KPa." Support for this amendment can be found in the original Specification at least at p.7, lines 17-24, stating that the high-pressure refrigerant is pressurized to between 700 and 1600 KPa, and p.11, lines 1-22, indicating that the "relatively low pressure" is relative to the fluid using the special flow control means (i.e., the high-pressure refrigerant).

Applicant requests reconsideration and withdrawal of this rejection of claims 22 and 27.

Rejections Under 35 U.S.C. § 103

Claims 21, 22, 26, 27 and 29-31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,514,251 to Ni et al. (hereinafter “Ni”) in view of U.S. Patent No. 6,969,373 to Schwartz et al. (hereinafter “Schwartz”).

Regarding claims 21, 22 and 29, the Examiner contends that Ni discloses most of the elements of these claims except for a flow control mechanism formed on the outer surface of the first non-insulation area. The Examiner further contends that the sheath 76 depicted in Fig. 11 of Schwartz acts as a discharge resistance, and that it would be obvious to combine Ni and Schwartz in order to better control the cloud pattern and to more effectively ablate the tissue.

Sheath 76 of Schwartz, cited by the Examiner, controls a low-pressure discharge by either completely occluding or completely exposing the holes 66 (col. 16, line 63 – col. 17, line 14). The Examiner appears to contend that this is a discharge resistance because at least some of the holes 66 can be occluded, even though the holes not occluded are entirely uncontrolled. The design of Schwartz is ineffective for controlling a high pressure refrigerant like that of the present application, because the present application teaches that without a discharge resistance the refrigerant would explosively spout from even a “very small hole” formed by a mechanical process (Specification, p.8, lines 18-24). Thus, using the design of Schwartz for a pressurized refrigerant would result in either no discharge at all from occluded holes, or explosive spouting from the holes that are exposed.

In contrast, a “discharge resistance” as defined by the present application, restricts *all* holes at *all times* from the high-pressure area in order to prevent explosive spouting, while still allowing a *controlled flow* of the pressurized refrigerant from the restricted holes.

Amended claim 21 recites in part that the hollow electrode is “including at least one hole formed thereon.” Support for this amendment can be found at least at original Specification, p.6, lines 17-20, describing “hollow electrode 20 having a refrigerant discharge hole 22.” Amended

claim 21 further recites that the discharge resistance is “configured to control *at all times* a flow of the pressurized refrigerants from *all* holes in the hollow electrode” (emphasis added). Support for this amendment can be found at least within the embodiment shown in FIGs. 3-4, wherein *all* hole(s) **22** on hollow electrode **20** have applied *at all times* a discharge resistance, the discharge resistance being shown in this embodiment as a hollow tube **50** covering the hole(s) **22**. Claim 26 has been amended to be consistent with claim 21.

Claims 30 and 31 depend upon claim 21 and should be allowable by reason of their dependency upon an allowable base claim.

Regarding claims 26 and 27, the Examiner contends that these method claims are anticipated by the normal use of the device. Applicant submits that Ni in view of Schwartz does not disclose the device subject to the method of claim 26 as amended, at least for the reasons presented above with respect to claim 21. Claim 26 should be allowable, and claim 27 should be allowable by reason of its dependency upon an allowable base claim.

Applicant requests reconsideration and withdrawal of the rejection of claims 21, 22, 26, 27 and 29-31 over Ni in view of Schwartz.

Claims 23 and 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ni in view of Schwartz and further in view of U.S. Patent Publication No. 2003/0208194 to Hovda et al. (hereinafter “Hovda”). Claims 25 and 33 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ni in view of Schwartz and further in view of U.S. Patent No. 6,017,338 to Brucker et al. (hereinafter “Brucker”). Claim 34 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ni in view of Schwartz and further in view of U.S. Patent No. 5,281,215 to Milder.

Claims 23-25, 33 and 34 depend upon base claim 21, and should be allowable by reason of their dependency upon an allowable base claims.

CONCLUSION

Each and every point raised in the Office Action dated April 23, 2008 has been addressed on the basis of the above amendments and remarks. In view of the foregoing it is believed that Claims 21-27, and 29-34 are in condition for allowance and it is respectfully requested that the application be reconsidered and that all pending claims be allowed and the case passed to issue.

If there are any other issues remaining which the Examiner believes could be resolved through a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

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Respectfully submitted,

By Alexander D. Walter
Alexander D. Walter
Registration No.: 60,419
DARBY & DARBY P.C.
P.O. Box 770
Church Street Station
New York, New York 10008-0770
(212) 527-7700
(212) 527-7701 (Fax)
Attorneys/Agents For Applicant